

Activity 4

Finding the Centres

Activity focus

In this activity, students will take turns kicking a football through goal markers. The number of accurate kicks (through the goals) for each student will be recorded in a tally. Students will use the dataset to find the mean, mode and median, which indicate the central tendency of the data.

What you will need

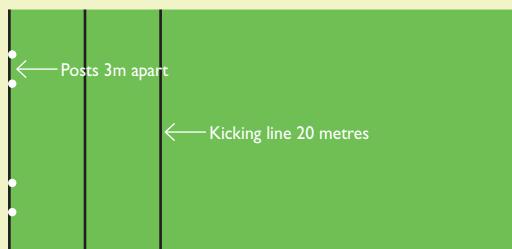
- Footballs
- Posts
- Cones
- Internet access is recommended
- Whiteboard/paper and coloured markers

Statistical concepts

Dataset, mode, median, mean

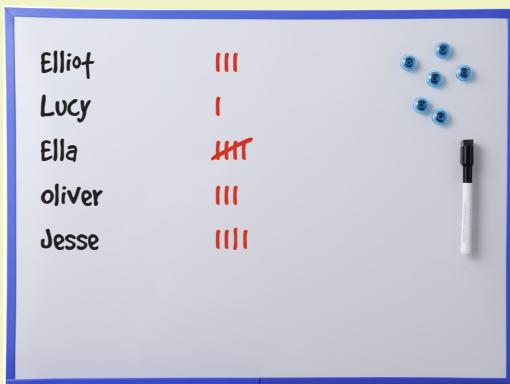
Activity instructions

- Set up an area as follows:



- Split the class into 2 groups so there are 2 people kicking at the same time through separate posts.
- A grubber kick is a drop kick that bounces along the ground.
- Each student will line up and attempt to grubber kick a football through posts set 3 metres apart from 20 metres directly in front of the posts.

- Each student will have 5 attempts at grubber kicking the ball through the posts. Each time the ball goes through the post, record this as a goal (i.e. the kick is accurate) – a mark is put on the tally against their name, for example:



- Students will record their own scores on a personal tally sheet.
- Use the tally of results (the **dataset**) to find the **mode, median** and **mean**.

Finding the mode

- Use the tally to work out how many people kicked 1 goal, 2 goals, 3 goals, etc. In the example dataset, the mode is 3, as 3 is the most common value (i.e. 3 goals were kicked by 2 people).

X		X		
1 goal	2 goals	3 goals	4 goals	5 goals

Finding the median

- Order the data from lowest to highest and find the middle value. In the example dataset, the median is 3, as it is the middle of the five observations:

Dataset = 1 , 3 , 3 , 4 , 5



FOOTY STATS ACTIVITY 4 – Instructions